

## Water Woes in Central Asia

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### ABSTRACT

Water problems have been a serious factor of regional security in Central Asia since the early 1990s. The lack of coordinated interaction between the countries of the region on the use of limited water resources, the effect of global climate change, growth of population and, as a result, increased water consumption have led to the physical decrease of hydro resources in the region. Different and water approaches of the Central Asian countries, differing interests needs of each of the countries determine the complexity of the water problem in Central Asia: the upstream countries use water to generate electricity, while the downstream countries need water for irrigation purposes. While the policies of the new president of Uzbekistan have led to the close cooperation between in the region, the states should be involved more in developing mechanism for joint and sustainable use of water resources.

**KEYWORDS:** *water resources, cooperation, competition, Central Asia*

### INTRODUCTION

One of the most difficult problems for the countries of Central Asia is the shortage of fresh, potable water and the issue of the joint use of transboundary water resources. The current realities in Central Asia are directly related to the ongoing economic policy, the lack of interaction between the countries of the region on the use of water resources, as well as climate change, population growth and consumption of water resources, which has already led to a physical decrease in water reserves. A feature of the hydrographic network of Central Asia is the extremely uneven distribution of its water bodies, not only within the region, but also within each of the countries of the region, which does not allow countries to fully use water resources in ensuring their national interests. The main sources of water in the region are located within two states - Kyrgyzstan and Tajikistan, which creates difficulties in the relations of these countries with other countries like Uzbekistan, Kazakhstan and Turkmenistan. The situation is also complicated by different approaches to water use.

Since the early 1990s, water problems have become factors of regional security. The existing mechanism for the use of transboundary water resources in Central Asia has a significant potential for conflict,

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water problems occupy one of the leading places in the hierarchy of problems in the Central Asian region. As a result, the problems associated with water use in the Central Asian region have a considerable potential for conflict and require constant monitoring. Despite numerous discussions and attempts to resolve the water issue, the parties have not come to an agreement. The involvement of other countries and international organizations has also been unsuccessful in efforts to contribute to the solution of the water problem.

At present, the region is witnessing a warming of relations and the elaboration of a joint course for the development of Central Asia after the coming to power of the new President of the Republic of Uzbekistan, which may also have an impact on the development of the situation around water and energy resources.

### CLASH OF INTEREST

All states located in Central Asia have been experiencing a shortage of water resources for many centuries. In this region, since water resources are considered the basis for the development. Fair and reasonable use of transboundary water resources in the Central Asian region is a general problem that

combines economic, water-energy, environmental and political problems. It should be noted that practically all publications dealing with water resources problems in Central Asian countries have different figures for the volumes of flow of the main rivers and their tributaries. This is due to the fact that after the disappearance of the Soviet Union from the political map of the world, the unified system of hydrological observations and their accounting fell apart. This led to the formation of national services, the activities of which are subordinated to upholding exclusively the interests of individual states. Moreover, in the statistics of Central Asian countries there is a partial concealment of the true data and deliberate overestimation and distortion of indicators in order to obtain additional volumes of water and donor assistance, often for political reasons, etc. Experts discuss this issue a lot, but this does not change the situation yet, determining a wide range of data.

Most of the water resources used in the Central Asian region are formed from two main rivers - Syr Darya and Amu Darya, which flow from the Pamir and Tien Shan mountains. The Syr Darya begins its course from Kyrgyzstan, flows through Tajikistan to Uzbekistan (including Ferghana valley with a dense population) and Kazakhstan, and the Amu Darya from Tajikistan to Uzbekistan and Turkmenistan. The water resources of the Syr Darya, which have 37 km<sup>3</sup> of average multi-year flow, is divided as follows, 74% comes to the share of Kyrgyzstan, 14% to the share of Uzbekistan, 9% - to Kazakhstan and 3% - to Tajikistan. The water resources of the Amu Darya, having 78 km of an average multi-year flow, which is divided as follows, more than 80% comes to the share of Tajikistan, 6% to the from Uzbekistan, 3.5% - from Turkmenistan (together with Iran) and 7.9% from Afghanistan (Abdushahidov, 2021). Both rivers, Amu Darya and Syr Darya, bypass Uzbekistan, the most populous country in the region.

In the period after the Central Asian countries gained independence, the problem of managing water and energy resources has become extremely acute due to the collapse of a single centralized model of their management. Attempts to replace outdated water management systems with new ones based on regional integration slowed down the possibility of outright water conflicts, but did not give a general result in solving this problem. The countries of Central Asia, having failed to develop a multilateral mechanism for the distribution of water resources of transboundary rivers, tried to reach a compromise in a bilateral format. However, such attempts have also shown their ineffectiveness, primarily due to the unwillingness of each of the Central Asian countries to take into account the interests of their neighbours.

Uneven distribution of water resources in Central Asia has led to fierce competition and conflict of interests among key water abundant, upstream countries with geographical advantages. Tajikistan and Kyrgyzstan, which control up to 90% of the region's water resources, are economically and demographically inferior to their neighbours - downstream countries - Uzbekistan, Kazakhstan and Turkmenistan, which are the main water consumers. There is a vicious circle: the hydro-energy priorities of the upstream countries contradict the agrarian interests of the downstream countries. The first one needs electricity to solve social and economic issues, and the second one needs water for the development of irrigated agriculture.

During the Soviet era, water distribution and water use were not a source of conflict between the former republics of Central Asia because the upstream republics in the Soviet Union provided the necessary subsidies to allow them to run water for irrigation in downstream republics. Accordingly, the republics located upstream did not set the task of generating the maximum amount of electricity (Zhiltsov & Zonn, 2008). After the collapse of the USSR, the situation changed. We can say that hydropower and irrigation in Central Asia have come into conflict with each other. This is due to the difference in the interests of the Central Asian countries.

For Kyrgyzstan, the Syr Darya water basin is the "heart" of the country. Five main hydroelectric power plants located on the Naryn River produce 97% of the country's hydropower (Makilova, 2017). Although currently only a small part of the potential of hydropower is being used. The country exports from 2 to 2.5 billion kWh to neighboring countries such as China, Kazakhstan and Uzbekistan (Makilova, 2017). Therefore, for Kyrgyzstan, the main interest is the production of a sufficient amount of energy for domestic use, as well as its export to other countries. As in Toktogul, many artificial reservoirs were created to function not only to store water resources, but also to minimize the risks of seasonal flooding and the production of hydropower.

After gaining independence, the downstream countries stopped supplying oil, coal and gas to the upstream countries. This left the upstream countries no choice, forcing them to increase their water discharge in winter to generate more hydropower (Khurramov, 2015). Kyrgyzstan has also built additional power plants on the Naryn River in addition to those built during the Soviet era. The country also plans to build more than 200 small hydropower plants to meet the energy needs of small rural villages (Mubarakshin, 2013).

The interests of Uzbekistan in the water sector do not coincide with the interests of Kyrgyzstan. While Kyrgyzstan is interested in increasing electricity production, it is important for Uzbekistan to develop agriculture. First of all, this concerns the cultivation of cotton. Although only 10% of its land is arable, cotton is the most important crop, and cotton production accounts for about 90% of its total water use. Uzbekistan has made efforts to reduce its dependence on cotton cultivation in order to reduce the amount of water used for irrigation (Abdullaev & Aliev, 2015).

By the 1990s, they were able to reduce cotton production to about 30% of the total irrigated area, replacing it with the cultivation of other crops such as wheat and vegetables (Abdullaev & Aliev, 2015). Nevertheless, for Uzbekistan, which has long opposed the construction of new hydroelectric power plants and reservoirs by Kyrgyzstan at the top of transboundary rivers, water issues remain one of the key issues.

Uzbekistan also objected to the construction of hydroelectric power plants in Tajikistan. The situation was aggravated by the acuteness of water issue in the region. Uzbekistan then stopped gas supplies and increased tariffs for freight transportation by rail. In turn, Tajikistan began to build new hydroelectric power plants. This led to an exacerbation in bilateral relations. Over the years of independence, more than 20 border checkpoints have been closed between the countries, and border fields have been mined on the Uzbek side (Ito, Khatib, & Nakayama, 2015).

Like Kyrgyzstan, Tajikistan suffers from energy shortages. Its shortage is aggravated by the operation of the aluminum smelter and the increase in electricity consumption during severe winters (Zhiltsov & Bimenova, 2015). In this regard, the country's main interest is to ensure sufficient energy for domestic consumption and the production of hydropower for export. However, the country is more focused on the development of its hydroelectric power plants in the Amu Darya basin, since it occupies almost the entire upper river basin. Tajikistan has already built about 250 hydroelectric power plants in the Vakhsh River, which is the most important tributary. Also, until recently, Tajikistan and Uzbekistan argued about the feasibility of building and the size of the Rogun dam, which will become the highest in the world. Kazakhstan is primarily interested in managing water flows that originate in Kyrgyzstan and pass through Uzbekistan, especially during the growing season. Kazakhstan is also interested in the revival of the northern part of the Aral Sea. To prepare and minimize the

consequences of reduced runoff from the upper reaches of transboundary rivers, Kazakhstan has built the Koksaray reservoir, located just above the Aral Sea. This allows Kazakhstan to store and release water in winter, thereby reducing its dependence on upstream discharges. The reservoir also allows Kazakhstan to conserve previously unused water and control flow into the Aral Sea. However, in addition to using the waters of the Syr Darya River, no less urgent problem for Kazakhstan is the use of water resources in the Ili and Balkhash rivers. The Ili-Balkhash basin is located in the easternmost part of the country bordering China. The Chinese are actively using the water of this basin, which jeopardizes the ecological balance.

Water problems in the region arise due to the fact that each country focuses on its national interests for the development of its economy. The problem of water resources is connected not only with water itself, but also with energy needs and agriculture. In other words, the water problem combines the vital needs for drinking water, food and energy. Therefore, it is imperative to find a mechanism that will more effectively replace the former Soviet barter system. It is important to understand the water in the region is the source of survival. Without sustaining energy production for upstream countries and agricultural industries for downstream countries, the controversy will continue. The volume and quality of water in the basin continues to deteriorate, so short and long term solutions are needed to maintain the use as well as the ecological health of the water (Tobirov, 2017).

In the framework of the water-energy nexus, the countries of the region need to continue to jointly search and develop solutions to obtain "common benefit" or "mutual benefit". Continue to carry out actions under the Aral Sea Basin Program (ASBP), which is one of the channels to facilitate regional efforts to develop a water cooperation concept.

The starting point for the mutually beneficial cooperation can be a change in the situation in the Republic of Uzbekistan, in connection with the election of a new president, ShavkatMirziyoyev, who has already shown himself as a leader aiming at strengthening cooperation with the countries of Central Asia. This is evidenced by the progress in relations between the Republic of Uzbekistan and the Republic of Tajikistan: the abolition of the visa regime, border checkpoints were reopened.

An important stage in relations between the countries of Central Asia was the meeting of heads of state in the city of Nur-sultan (then Astana), which was held on March 15, 2018 at the initiative of the President of the Republic of Uzbekistan (Putz, 2018). During the



meeting, the countries stressed the need to expand cooperation within the region, not only in the economic sphere, but also the development of transport links. Since the heads of state decided to hold such meetings on a regular basis, this platform can play a big role in solving the water problem in the region.

Equitable and sustainable management of shared water resources requires institutions that can provide a holistic approach to this problem and effective methods of solving it. Experience shows that despite the existing problems, in the joint use of transboundary river basins, conflicts, as a rule, give way to cooperation. The international community has made significant progress in understanding that water has not only economic but also social, religious, cultural and environmental value. Such a clear distinction between the value of water, that is, its general use, and the price of water, that is, fees charged to consumers, contributes to an objective approach to the choice of strategy for ensuring access to water, regardless of the social category of the population.

The economies of the Central Asian countries are closely related to the use of transboundary water resources. In the basins of transboundary rivers, most of the population is engaged in irrigated agriculture, and it provides almost all agricultural products. The region has sufficiently developed mining, processing and high-tech industries and industries. Water scarcity and pollution are turning into the most serious problem facing the Central Asian countries for the region's economy, and these challenges have an impact on various aspects of regional cooperation and security. Depletion and pollution of water sources cause deterioration of sanitary and environmental conditions, and the growing water shortage reduces the level of food supply and employment of the population, which generally makes it difficult to solve the problem of combating poverty in the region. Meeting both immediate and future water needs requires consistent national and regional policy responses to address the water-related challenges to sustainable development. In this it is necessary to rely on international experience and recommendations of the international community. Of particular importance for the countries of Central Asia is the water conservation policy, which is an uncontested way for the region in solving the problem of sustainable water use, both in the short and long term.

### THE AFGHANISTAN FACTOR

Afghanistan remains away from the water "battle" of the five Central Asian countries, which is still not taken into account due to the ongoing conflict, but

which will certainly contribute to the process of water distribution along the Pyanzand Amu Darya rivers. There is also China, on the territory of which the river flow is formed along the basins of the Irtysh and Ili rivers. More than 20 small rivers flow to Kazakhstan and then to Russia. China's plans to increase water withdrawal from the upper reaches of watercourses transboundary with Kazakhstan are of great concern, primarily on the Kazakh side. In recent years, Kazakhstan has already experienced a shortage of fresh water. If the trend towards an increase in the intake of water resources from their transboundary rivers continues, Kazakhstan may face a significant decrease in electricity generation at the cascade of hydroelectric power stations on the Irtysh. The importance of Tengry Peak, located on China-Kazakhstan-Kyrgyzstan border point, cannot be overstated. As a glacial mountain, it is a source of fresh water to adjacent territories in all three countries.

The increase in water intake from the Ili River on the Chinese side will lead, first of all, to the shallowing of Lake Balkhash, since it provides 70-80% of the water inflow. In the future, this can lead to the Balkhash tragedy, similar to the one that occurred in the second half of the 20th century with the Aral Sea. It should be noted that at present, Kazakhstan is striving to solve the problem of the Aral Sea, being engaged in its partial restoration.

Legal regulation of the issues of joint use of transboundary rivers, the watersheds of which do not coincide with the existing administrative boundaries, are of great importance in sustainable water use. The number of international river basins currently exceeds 250, and 145 states use their water resources. Many regions and downstream countries depend on upstream users. This applies primarily to the Central Asian countries.

Transboundary rivers that have a certain importance in the water policy of Central Asia are located in the northern regions of Afghanistan the most fertile lands are located in the Amu Darya zone. This is the Afghan part, the so-called Obruchevskaya steppe: the zone of "blind" river deltas - from Kunduz to Andkhoy. On the territory of Turkmenistan, they are limited from the north by the Amu Darya channel. Moreover, land development from the Afghan side is likely to begin in any case, with or without an agreement on the division of the river flow. Apparently, Afghanistan is trying to create a serious food base in this region.

Large areas of land suitable for irrigation are separated from the river by a continuous strip of mobile sandy patches up to 20–30 km wide. The

complexity of the head water intake and the canal through the sands made the development of irrigation with the Amu Darya waters in Afghanistan in the past impossible. Only the involvement of modern construction equipment will allow the construction of new irrigation systems. However, they can be economically justified only with a sufficiently large irrigated area, which will require correspondingly large water withdrawals from the river.

Irrigation of the entire free land fund of Northern Afghanistan (more than 1.5 million hectares) is possible without the construction of hydroelectric facilities, with the organization of water intake sans dams with a machine-driven rise of water at three points: in the area of the confluence of the Pyanz and Vakhsh rivers; at the Geshtepe outpost (opposite the mouth of the Kafirnigan River); at the gorge of Kelif. For the rest of the border section, the river is wandering, does not have a permanent channel, and is not convenient for a damless water intake. The height of the water supply in all cases does not exceed 20–30m, and thermal power plants using local natural gas can serve as energy sources (Habib, 2014).

The Kokcha and Kunduz rivers are entirely internal sources of Afghanistan. Their free annual runoff used for irrigation of 50% of supply is estimated at about 9.9 km<sup>3</sup>, including Kokcha - 6.2 km<sup>3</sup> and Kunduz - 3.7 km<sup>3</sup>. The Pyanz River, originating in the mountainous regions of Afghanistan and Tajikistan, is glacial-snow fed, flows along the southern border of Tajikistan for 921 km and is formed by the confluence of the Vakhandarya and Pamir rivers and can be used by both Tajikistan and Afghanistan. The catchment area of the rivers is 107 thousand km<sup>2</sup>, the total surface inflow from the mountainous part of the basin is 1100 m<sup>3</sup>/s (56% of the Amu Darya river runoff in the section of the city of Kerki). Its annual runoff with the exclusion of the river runoff from it Kokcha is 28.5 km<sup>3</sup>.

If Afghanistan fully uses the water resources of its own rivers Kokcha and Kunduz for the development of irrigation, then its claims to the Pyanz runoff will amount to 3.3 km<sup>3</sup> per year, or 11.6% of the annual runoff of this river (Habib, 2014). The development of irrigation on the territory of Uzbekistan and Turkmenistan in the middle and lower reaches of the Amu Darya will experience great difficulties if the Afghan side carries out water withdrawals by damless, and, consequently, uncontrolled water intakes. This provision can be excluded if water withdrawals are carried out from the headwater of the hydroelectric complex within the framework of the relevant agreement, and releases in the required

amounts are guaranteed down to the main water intakes to the territory of these countries.

## IMPACT OF CLIMATE CHANGE

In recent years, the impact of climate change on the state of water resources has become increasingly important, which is manifested in an obvious trend towards an increase in extreme weather conditions, accompanied by floods and droughts. The increased melting of glaciers creates a high risk of flooding and leads to a serious reduction in fresh water supplies in summer. Thus, a study by the Intergovernmental Panel on Climate Change, operating under the auspices of the United Nations, shows that since the beginning of the 20th century, the overall temperature in the Central Asian region has increased by 1–2% and that further temperature increases should be expected in the coming decades another 2–4%. This region is officially recognized as one of two hotspots on the planet, where climate change will have a particularly strong impact, significantly reducing the available water resources. According to a study by the World Bank, in the next 20 years, this could lead to a drop in total gross domestic product by 11% (IPCC, 2014).

The increase in temperature will most negatively affect the state of agriculture. Thus, according to forecasts, by the middle of this century, due to the melting of mountain glaciers, the river runoff in the Amu Darya basin will decrease by 30% compared to the average runoff of the last 10 years. At the same time, floods will be observed in the spring and drought during the hot summer months during the growing season.

A 2014 IPCC report noted that many regions of Central Asia have already achieved high levels of water stress. This is due to an increase in temperature and a decrease in precipitation (IPCC, 2014). The risks associated with the threat to the safety of dams and other hydraulic structures, especially large ones, are growing. The main likely impacts of climate change in the coming decades include: a shift in the seasonal peak (1–2 months earlier), an increase in total runoff for about half a century (as glaciers melt), and the subsequent complete dependence of runoff on precipitation with unpredictable changes in volume and distribution.

A decrease in river runoff during the low-water period leads to a significant deterioration in water quality due to an increase in the concentration of harmful substances in it and an increase in its temperature. Recent estimates indicate that climate change will increase water scarcity in the world by 20%, and under a pessimistic scenario, 7 billion

people will be exposed to water shortages already in the middle of this century, and under an optimistic scenario, 2 billion people in 48 countries. Thus, among the main reasons for the alarming increase in problems, we note the following: continued population growth, global warming and the increasing likelihood of drought; desertification, which annually threatens already low-fertile agricultural land, outdated water infrastructure (Zhiltsov & Zonn, 2019).

### WIDER IMPACT

The solution of the water issue at the international level, taking into account the developed conditions of the existing conventions (the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Helsinki Water Convention 1992), the UN Convention on the Non-Navigational Use of International Watercourses (1997)) can be of decisive importance for political stability and to promote the economic development of the countries of Central Asia and their neighbors. This will require a revision of the positions of regional leaders who are not yet ready to give up their water selfishness. The meetings of the leaders of the countries of Central Asia, which took place in 2017-2018, demonstrated the presence of political will and a desire to resolve water conflicts. However, the decisions taken did not receive support in the form of specific mechanisms capable of taking into account the interests of all countries in the region. In an analytical note based on the research "Rethinking the water issue in Central Asia: the cost of inaction and the benefits of water cooperation", 2017, conducted by the advisory bureau "Adelphi" and CAREC (Regional Economic Center for Central Asia) with the support of the Swiss Water Initiative, it was noted: "The lack of full-fledged cooperation on water issues entails significant losses and serious risks that undermine the future development of the region as a whole. Even if not all the components are taken into account, the losses due to insufficient effective cooperation exceed US \$ 4.5 billion per year".

The young states of Central Asia found themselves in difficult conditions of finding an optimal balance between national interests and the plans of all interested large foreign players. At a meeting in Luxembourg in June 2017, the EU foreign ministers agreed to formulate a new EU foreign policy strategy for Central Asia by 2019, which is intended to replace the current 2007 document "EU and Central Asia: a strategy for a new partnership". The final document of the meeting of the Council of Foreign Relations of the EU on June 19 notes that the EU considers the countries of Central Asia to be important partners,

relations with which should be developed and expanded. In this partnership, both old, proven mechanisms and initiatives will be preserved, and new ones will be created (Kurtov, 2013).

The Council of International Relations paid a lot of attention to specific problems of Central Asia, such as, for example, water scarcity, unemployment, poverty, inequality, border protection. This strategy is supported by a significant increase in EU assistance and contributions. In this context, water resources management is an urgent and priority task. This is confirmed both by the approaches of the EU and by the foreign policy rhetoric of the Central Asian countries over the past five years. There is also an understanding that the issues of water resources cannot be considered separately from the issues of climate change, agricultural development and others. A comprehensive solution to issues is required, the so-called NEXUS approach, which takes into account the interdependence of water, energy and agricultural development.

One of the significant results in this direction was the implementation of the project "Promoting dialogue to prevent disagreements on issues related to the environment and water management NEXUS in Central Asia" - CAWECOOP (2015–2017). Its main goal was to increase transnational trust and political participation in water and energy cooperation in the field of water resources management.

All Central Asian countries, with the exception of Afghanistan, are not only members of the Commonwealth of Independent States (CIS), but are also members of the Economic Cooperation Organization (ECO), Central Asian Cooperation Organization (CACO), participate in the Partnership and Cooperation Agreement with the EU. Four of them, excluding Turkmenistan, as well as Russia and China, are members of the Shanghai Cooperation Organization (SCO), which has not only an anti-terrorist orientation, but also initiates interaction and cooperation on such issues as transport, energy, and mining. This contributed to the continuation of the construction of hydroelectric power plants on the Vakhsh and Naryn rivers. They are also members of the Collective Security Treaty Organization (CSTO), which ensures the security of the southern borders of Russia and the countries of Central Asia. At the same time, the imaginary and unsuccessful integration efforts in Central Asia are very noticeable in the field of water resources (EU, 2017).

The economic recovery that began in Central Asia in the last decade and the resolution of border disputes has reduced the likelihood of interethnic conflict.



However, the threat from radical Islamist movements has not yet diminished. They still remain an important factor influencing the development of the political situation in Central Asia, thereby having an indirect impact on the water-energy interaction of the countries of the region.

Central Asia is one of the few regions in the world where the possibility of a water war is not only allowed, but also considered as a “working” option and there are several reasons here: the conflict of the “lower” countries, the conflict of “independence”, the conflict of authoritarian regimes, tough interethnic contradictions, and resultant growing pains across the region. (Likhacheva, 2014). The implementation of new transboundary projects, among which the Great Silk Road plays an important role, or as it is called the "Economic Belt of the Silk Road", will require a significant increase in water resources to provide its infrastructure.

## CONCLUSION

Currently, water resources are limited in the regions of Central Asia and therefore their optimal use and management is becoming the main issues. Central Asia has a high water potential, since the region contains not only a large volume of fresh water, but also the region's water is recognized as high quality, and the region's transboundary water resources are an irreplaceable and universal natural heritage of every Central Asian country. At the present stage, the water potential of the region has already suffered due to intensive technogenic interference, and also decreased due to irrevocable consumption and pollution of water resources. An example is the drying up of the Aral Sea. For this reason, water for the countries of the region plays a key role in ensuring not only the environmental, but also the economic security of the state. Its shortage aggravates relations between countries and is the reason for the rivalry for the possession of water resources.

Different approaches of the Central Asian countries, differing interests and water needs of each of the countries determine the complexity of the water problem in Central Asia: the upstream countries use water to generate electricity, while the downstream countries need water for irrigation purposes. Different understanding of the water use of the Central Asian countries is due to their national interests. Since the upstream countries, Kyrgyzstan and Tajikistan, do not have enough hydrocarbon resources, hydropower is their priority. In the downstream countries, Kazakhstan, Turkmenistan and Uzbekistan, the economy is dominated by agriculture. Its development requires large volumes of water in the summer.

The states located in the lower reaches of transboundary rivers do not want and are not ready to recognize water as a commodity and bear the costs associated with the maintenance of hydraulic systems in the upstream countries - Kyrgyzstan and Tajikistan. They are trying, through international agreements, to consolidate the practice of water allocation, which is used in other regions of the world. These are the principles and recommendations enshrined in the documents: the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, March 17, 1992), the UN Convention on the Law of the Non-Navigational Uses of International Watercourses (New York, 21 May 1997), etc. However, these documents do not contain provisions on the problems of international state water allocation, water use and environmental protection, which are so important for the region, in conditions of a shortage of water resources, which is typical for Central Asia.

With regard to the above conventions, not all countries of the region are parties to them, for example, Kyrgyzstan and Tajikistan use them as recommendations for determining in the practice of water use. However, Tajikistan builds its interests in the water and energy issue, taking into account the interests of neighboring states in accordance with the principles of the UN Stockholm Conference of 1972. They state that “states have the sovereign right to exploit their own resources (water) in accordance with their own environmental policy and responsibility confident that this activity within their jurisdiction and control will not harm the environment of other states or territories outside their national jurisdiction”. Based on this, we can conclude that each of the parties to the issue is trying in every way to protect its national interests.

Thus, water resources can be viewed as a common problem in Central Asian countries, as it is a key potential factor that can lead to regional conflicts. Despite different approaches to water use, the countries have repeatedly resorted to dialogue to solve common environmental problems like the situation around the Aral Sea, and also attracted international organizations such as the UN and UNECE to find ways to solve the water problem. Also in Central Asia, there are a number of regional organizations that contribute to the positive development of dialogue. First of all, this is the Interstate Commission for Water Coordination (ICWC), which is the main body that makes the main decisions and performs important tasks for the effective management of water resources and sustainable development of the sector in Central Asia;

The International Fund for Saving the Aral Sea (IFAS), which is engaged in overcoming the environmental crisis and improving the socio-economic situation in the Aral Sea basin, recognized by the world community as one of the largest disasters of the 20th century.

During the sovereign existence of states, the countries of Central Asia have failed to develop an effective mechanism for joint water use. And the obstacle to this is, first of all, the fact that the countries of Central Asia directly compare the price parameters for the supplied water and energy resources. Secondly, the lack of clear legislation regulating the use of hydro resources of transboundary rivers also complicates the search for mutually beneficial solutions. Thirdly, in the field of water use, the countries focus on national interests, but you need to understand that all 5 countries of the Central Asian region plus Afghanistan have a single hydraulic system, and accepting the dependence of countries on neighbors may be the first step in developing this mechanism.

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